THE BOSTON
MEDICAL AND SURGICAL JOURNAL.

VOL. XCV. — THURSDAY, SEPTEMBER 28, 1876. — NO. 13.

PHYSICAL EXERCISE FOR THE SICK.[1]

BY JAMES J. PUTNAM, M. D.

It must always have been recognized by every physician having under his care patients afflicted with chronic, confining diseases, especially the so-called functional diseases of the central nervous system, that the treatment would be made immensely more satisfactory if it were only possible to utilize the many influences which the general term "physical exercise" dimly calls to mind, as they are utilized by the relatively and temporarily sick who call themselves well; nevertheless, when obliged to ask ourselves, in practice, exactly how this shall be accomplished, we are generally forced to acknowledge our utter helplessness. We know well the effect of a brisk walk, a row, or an hour in the gymnasium, in relieving the headache and backache of mental fatigue and bodily confinement, dyspepsia, constipation, and kindred ills in ourselves, and we listen with a sense of discomfiture and annoyance to the statements of our feebler patients that the nearest approach which they can make to these forms of exercise, which usually consists in a few turns round their chambers or the public square, is impotent to relieve similar disorders in them, if indeed it does not leave them with increased weariness and pain.

On the other hand, it must be known to most of my hearers that in a number of the cities of Europe and a very few of America institutions exist, by no means always conducted by money-seeking charlatans, where such cases as those to which I refer can, through appropriate and systematized physical exercise, secure relief which is often unattainable by other means.

It would be of great value to our community if reliable institutions of this kind could be established here, and as one step towards that end it is important for physicians to familiarize themselves with the methods of treatment adopted in these institutions and the principles on which they are based, especially as it is occasionally possible to apply the same principles to advantage in private practice.

The main source of the work which has been done in this direction

[1] Read before the Massachusetts Medical Society, June 13, 1876.

in the last half-century was in the efforts of the intelligent and zealous, though no doubt extravagant, student and gymnast, the Swede Ling, and the great Central Gymnastic Institute at Stockholm, founded at his instigation, which still sends out every year numbers of skilled gymnasts for the training of the sick and the well, has been the model for many of the institutions of which I have spoken. The treatment adopted in them has, as a whole, received the name of the Swedish movement cure. It embraces much of what is known as *massage*, although in its details and its elaboration the use of manipulation of the tissues, handed down to us from the ancients, has been elevated into a system of treatment by itself.

Visitors to Philadelphia can see in Machinery Hall a number of ingenious pieces of apparatus, designed by their intelligent exhibitor, the superintendent of a gymnastic institute at Stockholm, to carry out these methods of treatment, the hand of the *masseur* and the gymnast being superseded by steam-moved machines and adjustable weights. In the Main Building are also to be seen models of equally ingenious and simpler apparatus for accomplishing analogous results, contrived by Dr. C. Fayette Taylor, of New York, who is well known as an energetic worker in this direction. Finally, while speaking of apparatus for medical exercise I would refer to the "lifting-cure" machines, though their range of usefulness must of necessity be more limited than that of the others. For the best exposition of the principles which underlie these systems of exercise I would refer, with acknowledgments, to various papers by Dr. C. F. Taylor, without, at the same time, indorsing all the statements therein contained.

Judicious physical exercise may legitimately aim at securing the following results: (1.) The diversion of the mind, to the end of securing the influence of the will in promoting the proper performance of the processes necessary to health, and of turning aside the thoughts from directions in which they may be running to the detriment of the health. (2.) The establishment of a more perfect control of the will over the muscles. (3.) The stimulation of the nervous centres which control the vegetative processes of the body, and perhaps the nutrition of the tissues themselves in some degree. (4.) The furtherance of the circulation of the lymph and of the blood, by alternate dilatation and compression of the canals in which they are conveyed, and by acting through the nervous system upon the heart. (5.) Probably the removal of certain distressing conditions due to local congestions, especially in some cases of heart disease with congestion of the lungs, by increasing the activity of the circulation elsewhere, particularly through the muscles. It is claimed that patients suffering from the dyspnœa attendant upon heart disease often obtain great relief from some of the passive exercises to be described later, and form a considerable proportion of the most

faithful adherents to the treatment. The pulse is said to become fuller and stronger after the applications. The reason for this may be complex, as the same is said, I do not know if on good authority, to attend the use of the lifting cure. (6.) Possibly the stimulation of the nutrition of various tissues by direct mechanical excitation.

The means which are at our disposal for the accomplishment of these ends are of the following nature: —

I. For the mechanical excitation of the skin and deeper tissues, with their nerves and vessels, the parts may be strongly kneaded, stretched, etc., with the fingers or edge of the hand, according to the various methods of regular *massage;* every one who has experienced a manipulation of this sort must have been struck with the profound, yet not painful, impression which can be made by it upon the nervous system. The skin may also be easily reddened in this way, and when the immense capacity and variability in size of the vascular system of the muscles is borne in mind, it is easy to conceive that if these vessels are affected in like manner a considerable amount of blood will be withdrawn from the circulation at large. By the machinery on exhibition at Philadelphia similar effects are produced in several ways, such as the following: one or both legs are laid across a cushioned strip or oblong block of wood about three inches wide, which is then made to vibrate up and down with great rapidity. Thes ensation is like that felt when one is struck rapidly by the edge of the open hand of the *masseur*, but it is deeper and more intense, and is decidedly pleasurable.

Dr. T. Zander, the exhibitor, says that a feeling of coldness of the leg is often spoken of during the operation, but that it soon gives place to a sense of increased warmth. In a manner similar to this all parts of the body may be treated: the back, the chest, the throat, and the joints. The character of the application varies between vibration and percussion, and is administered either with broad padded surfaces of wooden hammers and knobs, or with small rubber-covered rods. The sensation felt throughout the operation is peculiarly engrossing and rather pleasant; that left behind by it, in a healthy person, may perhaps be described as resembling the feeling left by a moment's vigorous exertion, a sort of consciousness of the existence of muscles, ligaments, and joints, unaccompanied by any sense of fatigue.

It is said that when the lower part of the back is percussed in this manner, the patient leaning against a pad which moves rapidly from side to side, a desire to empty the bladder is felt which sometimes requires an effort to control.

There is reason to think that besides affecting strongly the sensitive, and by reflex action the motor nerves, and by quickening the local circulation, this mechanical agitation of the various tissues may increase the nutritive processes in them, perhaps directly, and perhaps also by increasing the flow of blood and of lymph.

It is, in fact, a matter of demonstration that simple passive motion of a limb, as, for instance, that of an animal which has been recently killed, will cause lymph, or, in place of it, colored fluids injected beneath the fascia, to be sucked up into the lymph spaces of the tendons and fasciæ, pumped into the lymph channels, and finally into the lymph ducts of the abdomen. In this connection the action of *massage* in improving the local nutrition of diseased joints, and in promoting absorption, is to be borne in mind.

II. For the purpose of establishing a more perfect relationship of control and obedience between the muscular system and the nervous centres it is often necessary to begin at the very bottom round of the ladder, and to let the movement which it is desired that the patient should carry out, such as breathing deeply, walking, or using the trunk and arms, be performed for him at first by an external power, while his will remains passive, or works with a minimal effort, parallel, as it were, with the movement which is going on. To this end Dr. Taylor has invented ingenious machines which, while the patient sits at rest, carry the legs through the movements of walking, or extend the arms strongly over the head, enforcing a deep inspiration, and the like. Having thus learned how these movements feel, often a forgotten knowledge, the patient may next try expending a slight amount of voluntary power in their production, and may gradually increase it, according to his ability, never being allowed to discover his weakness through failure, and always being kept up to the mark. Where the weight of even an extremity, or of the body, is too great for the patient's strength, a certain amount is taken off by the use of adjustable weights, and in this way he is enabled to perform every possible movement: bending of the body, or of the legs stretched out at length, extension of the arm at the shoulder, etc.

III. For the purpose of exciting the action of the intestines, in the relief of constipation, they may be subjected to various mechanical stimulations. By one method (Taylor's) the relaxed abdomen is pushed to and fro by wooden buffers, and kneaded as by the hand; by another (Zander's) the patient is placed upon a large saddle which is made to turn with greater or less rapidity in such a way that its inclination to the horizon is constantly changing. The patient's part is to maintain his seat erect, — no easy matter when the inclination and rapidity of motion are considerable, — and he finds, at the end, that an amount of contraction of the abdominal muscles has been instinctively put forth that he would not perhaps have believed himself capable of exerting, and that his abdominal viscera have received a fair share of churning. It is claimed that a persistent use of such means as these will after a time give great and even permanent relief.

It is unfortunately true that no satisfactory and sufficient scientific

explanations can be given of the exact physiological action of most of the methods of treatment described, but here, as in most other branches of therapeutics, science follows art with limping pace.

As for the evidence from experience, even if we refuse to admit the testimony of interested persons, we have collateral arguments of some value. The use of *massage* is highly esteemed by excellent physicians as a general tonic and for its influence upon local nutrition. So good an observer as Billroth thinks that he has seen tumors dissipated by it; it can hardly appear more remarkable that laryngeal catarrh should, as is claimed, be favorably affected by the firm and rapid vibration to which, by one of these machines, the throat is subjected. That the peristaltic action of the bowels should be increased by mechanical stimulation cannot surprise any one who has seen the same phenomenon in an animal recently killed; and the very fact that this result does not occur immediately as an effect of such treatment, but is the consequence of repeated treatments, might be taken as, to a certain extent, a warrant of permanency, since it implies, or may imply, a nutritive change in the corresponding nervous centres, which required time to induce, and which, therefore, would be the less likely to be ephemeral.

What might be called the sedative and derivative influences of exercise were spoken of in the early part of the paper as holding a recognized place in the household therapeutics of persons in comparative health, and still more striking results might be looked for among a certain class of the sick, those, namely, whose diseases consist essentially in a loss of the proper balance between the different departments of the nervous system. Such cases are well known to be exceedingly obstinate, and disheartening to treat as private patients, and they present very unpleasant symptoms, which, however, often disappear rapidly if the appropriate treatment is hit upon. For cases of this kind I believe that there is nothing which can compare with judicious and graduated physical exercise, and its influence may properly be classed among the "inhibitory" influences of the physiologist. In a state of health the various divisions of the nervous system stand in relations of mutual dependence, and what goes on in any one of them is not a matter of indifference to the rest. Thus, two impressions made simultaneously upon different parts of the nervous system may tend to strengthen each other's action or to partially annul it, according to laws which physiologists are now beginning to discover. In cases of so-called hysteria this balance is disturbed, and a disordered and excessive action of certain centres is produced, analogous to that seen in the spinal cord of a decapitated frog. Well-chosen physical exercise tends to counteract this condition, and to restore the needed balance, in the same way that strong mental influences, or counter-irritation of the skin, tend to do so, namely, by diverting the consciousness, as well as some of the

involuntary nervous processes, of the patient into new channels; but exercise is better adapted for this purpose than either of the other two agencies, because its action can be more certainly counted upon and more readily graduated, and because its effects are more likely to be permanent, the new directions into which the force of the patient is directed being such as tend to increase his health and efficiency.

In conclusion I will say a few words as to the special application which can be made by the general practitioner of the principles to which I have alluded, though it would be impossible to give a series of practical directions in so brief a space. For passive movements and manipulations we must usually content ourselves with those given by the professional manipulators, which, useful as they often are, can hardly make the same profound nervous impression as that which comes from the use of the evenly working, steam-driven machines of which I have spoken.

A degree of stretching which is often very grateful to a feeble person may be given by one or two intelligent assistants, grasping respectively the hands and the feet of the patient. Another method, somewhat more active, of accomplishing a similar end, suggested, as are indeed all of those which I shall mention, by Dr. Taylor,[1] is to let the patient, standing with feet together, grasp a bar immediately above his head, and while he keeps the legs and arms straight, allowing free motions only to the joints of the ankles, hips, back, and shoulders, to let an assistant take him by the middle and swing the body rhythmically and steadily and not too slowly around, as if it were a bow supported above and below at its ends.

Of the semi-active exercises in which the patient uses voluntary effort to overcome a graduated resistance, the physician can, under strict observance of correct principles, readily invent a sufficient variety, to be administered by the hand of an assistant, but, if the patient is not excessively feeble, and especially if, as in many so-called hysterical cases, it is desired to exercise certain groups of muscles, notably the extensors of the limbs, a few pieces of simple apparatus such as are described in Dr. Taylor's book will be found of service.

In the treatment of the common cases of bed-ridden, so-called hysterial patients, an important moral point is often gained and a useful faculty imparted, if they can be got safely on to their feet and be made to walk, though at first but half a dozen steps. To meet this need Dr. Taylor has used an apparatus, to the efficiency of which I can bear witness, which consists simply of a pair of strong jointless leg-irons, attached to a pair of boots below, and above to a band which is firmly strapped around the thigh, while the knee is prevented from bending by a leather knee-cap. This apparatus having been adjusted as the patient lies in

[1] Principles and Practice of the Movement Cure.

bed, the physician buckles a long webbing strap around his own and the patient's waist, or rather hips, and placing his hands underneath her arms hoists her, with the aid of an assistant who lifts the legs, upon her feet. It is evident, that secured as I have described, she cannot fall, the knee and ankle being held stiff by the apparatus and the hips by the strap, which the physician controls with his own body. The sense of security which is imparted by this contrivance is very great, and it is often no long time before first one knee-cap can be left off, and then the other, until at last the patient walks alone and feels herself in reality made anew.

For such a purpose as this, when it serves to bring encouragement to the patient, or when it is undertaken as a diversion, walking is of course often of the greatest value, but, regarded as physical exercise where it is desirable to husband the strength carefully, and at the same time to increase it by calling for nicely graduated exertion, it does not deserve the esteem which it has. Walking calls upon certain groups of muscles for severe and prolonged efforts, while it leaves others comparatively at rest, and, moreover, since a feeble patient is usually obliged to move slowly and stiffly on account of the weight of the mass to be moved, the beneficial effects of rapid movement upon the circulation of the fluids in the tissues, and, through the sensitive nerves, upon the central nervous system, are sacrificed. I have not spoken, in this paper, of the effects of the so-called lifting cure, partly because I have had no convenient opportunity to inquire into them, and partly because I think that this treatment involves no principle which the other forms of exercise do not also involve, although as a single form of condensed exercise it may be often very useful. It is claimed, and no doubt with reason, that the increasing weight searches out all the muscles whose associated action could help to raise it, until a large proportion of the voluntary muscles of the body are called at once into play. It ought to be said that this sort of exercise is believed by some persons to be not unattended with danger of strains.*

The increase in the ability to lift, which often goes on quite rapidly, up to a certain point, is of course due, not to growth of muscular tissue, but to the education of the nervous system. Permanently good results in difficult cases, even though exercise may be eminently indicated, is often obtained only after a trial of several different methods, any one of which, alone, would have failed.

RECENT PROGRESS IN THERAPEUTICS.[1]

BY ROBERT AMORY, M. D.

Amyl-Nitrite; its Physiological Action. — M. Jolyet,[2] from experiments with inhalation of amyl-nitrite, concludes that the blood under these circumstances will absorb less oxygen than in the normal condition, and, as a consequence, that less carbonic acid gas will be formed; also that the diminution in the absorption of oxygen is due to a transformation of hæmoglobine, but that this transformation is not permanent, since in twenty-four or forty-eight hours afterwards the hæmoglobine recovers its property of absorbing oxygen.

Fuchsine not a Poison; its Therapeutical Use in Albuminuria; its Use in Coloring Wines. — Messieurs Bergeron and Clouet [2] presented to the Société Industrielle de Rouen a communication stating the absolute harmlessness of pure fuchsine or hydrochlorate of rose-aniline (when freed from arsenical impurity), and they also reported the complete disappearance of a persistent albuminuria after the ingestion of this purified coloring matter. "During two months the urine, though oftentimes tested, failed to give any evidence of albumen." Dr. Feltz also reported a hospital case of an œdematous patient who had persistent albuminuria, in which fuchsine was employed in the dose of ten centigrammes (about a grain and a half). No particular discomfort or untoward symptom, either variation in pulse, temperature, or respiratory movement, followed its use. From this single case he deduced the following conclusions: —

(1.) Fuchsine in the quantity ordinarily employed to color alimentary substances is perfectly harmless, provided it be pure.

(2.) Fuchsine has a special effect on the character of urine secreted. It increases the amount of phosphates and causes the disappearance of albumen.

In another case of albuminuria, in which fifteen centigrammes (about two and a quarter grains) of fuchsine were employed in a divided dose, the albuminuria disappeared and was not detected four days after the second dose.

At a subsequent meeting of the Académie des Sciences, Messieurs Feltz and Ritter made a further contribution to the toxicology of fuchsine, which is used in large quantities at Nancy for the purpose of enriching the color of wines or for disguising the addition of water. The above-named physicians experimented on a robust man, fifty years old, to whom they gave on an empty stomach two hundred cubic centimetres (about three pints) of wine which contained fifty centigrammes (about seven grains) of fuchsine. Fifteen minutes after drinking the

[1] Concluded from page 348.

[2] Société de Biologie, Séance de 17 Juin; Gazette Hebdomadaire, June 23, 1876.

wine his ears became red, his lips itched, and his gums were swollen. These symptoms and an irritation of the mucous surfaces disappeared in three days. He then drank, during twelve consecutive days, about a litre of wine colored with fuchsine. The same symptoms were each time reproduced, and at the end of the twelfth day colicky pains and diarrhœa supervened; the urine which he voided assumed a rose-color, and finally became albuminous. Daily doses of sixty centigrammes of fuchsine were given to dogs, and were followed by rose-colored urine, emaciation of body, albuminuria (the urine also containing granular and degenerated cylinder epithelium), diarrhœa, and itching of mouth. Intra-venous injections of fuchsine in doses varying from thirty-five to sixty centigrammes, in some cases repeated daily for two or three days, were followed by congestion of the mucous surfaces. Two of the dogs died on the tenth and twelfth days, and another was killed on the twenty-first day. In all three the tissues were stained and the kidneys granular. All the dogs experimented upon had albuminuria.

Chloroform; Effects on Animal Temperature. — Dr. Simonin[1] records the effect of chloroform inhalation on the temperature of sixty individuals. In two thirds of the cases observed, he noted an elevation of temperature (one tenth of a degree to four tenths of a degree Centigrade) during the period of excitement. In ten per cent. of the cases he noted during the period of relaxation an elevation of one tenth of a degree centigrade, and in the other fifty-four cases a fall of temperature (two tenths of a degree to eight tenths of a degree).

In all the cases he observed during the period of collapse a fall of temperature (nine tenths of a degree to one degree and four tenths Centigrade).

A New Adhesive Plaster.[2] — A mixture of twenty parts of mucilage and one part of glycerine constitutes an excellent, shining, and supple plaster, far cheaper than resin and diachylon, and lasting more than a year without deterioration. Three or four layers of the mixture must be spread over each other on the linen or other stuff, allowing sufficient time for the successive layers to dry.

Absence of Mercury in the Milk of Nursing Women.— O. Kahler,[3] subjected two women to mercurial inunction, and even when the women were mercurialized he was unable to detect the slightest trace of mercury in their urine. Referring to the statements that mercury had been recovered from the milk of nursing animals which had been subjected to the action of mercury, the author explains the positive statements of experimenters by the suggestion that the erroneous conclusion was cause by the fact that in the method of analysis (electrolysis) materials were

[1] Revue Médicale de l'Est, 8, 1876, pages 1 and 3.
[2] Medical and Surgical Reporter, July 29, 1876.
[3] Präger Vierteljahrsschrift, cxxvii., s. 39.

used which contained mercury. He does not dispute the results of clinical experience which show so much improvement both in syphilitic mothers and in their children under mercurial treatment, but this is ascribed to the improved general health of the nursing parent.

Treatment of Albuminuria. — Dr. Hall,[1] after the clinical use of various forms of medication in albuminuria, sums up his experience and theory for treatment in the following words: "Dr. Southey attributes the success of the employment of the tartrate of potash in Bright's disease to the abundant diuresis of alkaline urine. . . . . I am speculative enough myself to imagine that an alkaline fluid, passing through the urine tubes, has some similar action to that of weak soda or potash solutions upon sections of dead kidney-tissue under the microscope. I mean that fat granules are saponified, cells are rendered more translucent, the interstitial tissues become looser, and the circulation is thus facilitated. . . . . As a general rule, far too little attention is paid by the medical attendant to the diet of the patient; that is to say, the directions given are vague in the extreme; but in acute albuminuria, as in typhoid fever, any indiscretion in the food may be visited with the most severe punishment; an attack of convulsions may be caused by excess, just as I have seen perforation result from taking solid food too early in typhoid fever. I would sum up the treatment of acute Bright's disease in the following words: —

"(1.) Milk and water with arrowroot; no solid food.

"(2.) Mild diuretics, such as the citrate or bitartrate of potash, with a free supply of water.

"(3.) The skin to be kept just moist.

"(4.) A daily evacuation of the bowels."

On Official Dosage, with some Remarks on Homœopathic Tinctures. — Dr. Farquharson,[2] lecturer on materia medica at St. Mary's Hospital Medical School, read a paper before the Medical Society of London, in which occur some rather startling statements upon the official doses and their disregard by practitioners of medicine. First, in regard to the dose of tincture of digitalis requisite in a case of delirium tremens, he refers to the well-known case of a physician in Ramsgate, who prescribed half an ounce of the above tincture in a case of severe delirium tremens, and to the fact that the druggist refused to dispense the medicine with the directions. The author then states that oftentimes very large and apparently dangerous doses are required to alleviate serious symptoms, and mentions his own experience of ordering ounce doses of succus conii for acute chorea in a girl ten years old; in this case the dispensary prescriber only gave drachm doses, fearing that an error had been made. "Here no harm was done, for the patient, afterwards get-

[1] Practitioner, August, 1876.

[2] Practitioner, May, 1876.

ting her proper dose, an ounce, was rapidly cured." In another instance Dr. Farquharson says that he prescribed twenty minims of tincture of belladonna for a child three years old, to the consternation of the apothecary. On these facts he bases his paper.

The authorized dose of succus conii [1] is represented in the British Pharmacopœia as varying from ten minims to a drachm. Dr. Farquharson says that John Harley's experiments teach us to give from one to six ounces.[2] He then comments on the advantage of using very large doses of belladonna in incontinence of urine, and states that he has given from a drachm to two drachms and a half, twenty minims being the official maximum dose.

Next, Dr. Farquharson considers the practice of giving small doses of quinine, remarking that many physicians now give twenty or thirty grains.

On the other hand, of aconite tincture (Br. P.) the official dose of five drops is too large for a minimum dose. The tincture of the United States Pharmacopœia is about three times as strong as that of the British.

Then again, bromide of potassium is often given in doses of thirty grains or more, and twenty, thirty, forty, and even sixty grains of iodide of potassium are not only harmless, but are often required to achieve brilliant success.

After the discussion of these doses and those of some other drugs, Dr. Farquharson takes up the homœopathic tinctures. He purchased a specimen of the strong or mother tincture of aconite, at a homœopathic pharmacy, and injected hypodermically five minims into a rabbit, and, five minutes later, fifteen minims, producing the death of the animal in "exactly five minutes after the injection was performed." Ten minims proved fatal to a smaller animal in twenty-five minutes.

Dr. Farquharson also found that the homœopathic mother tincture of belladonna was much stronger than that of the British Pharmacopœia. The other vegetable mother tinctures, he says, are as a rule made on the uniform standard of one part of the juice of the plant to one of spirit.

Dr. Farquharson then caused an analysis to be made of two homœopathic solutions, by the analytical chemist of Messrs. Savory and Moore.

(1.) "Arsenicum Alb., poison, dose for an adult, one to five drops," was estimated by volumetric and gravimetric methods with the following results: —

	Volumetric.	Gravimetric.
Arsenious acid	.994 gr.	.893 gr.
Water	100.000 grs.	100.000 grs.

[1] Not mentioned in the United States Pharmacopœia.

[2] In America we prefer to use other stronger preparations of conium because their effects are more precise, and the action of succus conii seems almost inert.

Reduced to fluid measures, there was one grain of arsenious acid in one hundred and two minims of water.

(2.) "Mercurius; Cor. Poison. Dose for an adult, one to five drops." Colorimetric and volumetric analysis gave the following results: —

Mercuric chloride	.75 gr.
Water	100.00 grs.

or, there was about one grain in two fluid drachms.

As these were the only analyses made, the author could only conjecture what strength other homœopathic remedies might have. The dangers to be apprehended from this state of things Dr. Farquharson pictures in an unpleasant light, and recalls to our memory Dr. George Johnson's interesting cases of homœopathic poisoning with monobromide of camphor.

Quinine. — Dr. Binz[1] contends that quinine does not diminish reflex excitability in the nervous system, and that its action as a febrifuge must be explained by its power of decreasing oxidation, and by disintegration of the elements of the body, and he brings, among other proofs in support of this theory, the fact that the excretion of urea is diminished. As this drug remains in the circulation for a long time, its antiseptic properties, which are not injurious to the tissues, are constantly exerted; moreover, as it does not form a compound and thus become inert, its action is superior to other antiseptic medicinal agents.

Binz adduces experimental evidence to show that quinine acts immediately upon protoplasm without reflex action through the nervous system. Following out the analogy of its uncertain action upon many septic ferments outside of the body, Binz would in the same manner explain its uncertain action upon different forms of fever; for instance, it is an efficient remedy against ague, and has no curative effect upon relapsing fever; it acts as an antipyretic agent in typhus abdominalis, but not in typhus exanthematicus.

Dr. Binz recommends large doses of quinine, to be given in solution with some acid, and during the remissions of the fever.

ANNUAL MEETING OF THE AMERICAN GYNÆCOLOGICAL SOCIETY.

The first annual meeting of the American Gynæcological Society was held in New York, at the Academy of Medicine, September 13th, 14th, and 15th. The great interest felt in the proceedings of the society by the members of the profession resident in New York was shown by the full attendance at all the sessions. From the beginning to the end the Academy of Medicine was crowded with an attentive audience. The society was called to order at ten

[1] Practitioner, June, 1876.

o'clock on the morning of Wednesday, September 13th, by the president, Dr. Fordyce Barker. The roll-call showed the following Fellows to be present: Drs. Fordyce Barker, E. R. Peaslee, T. A. Emmett, T. G. Thomas, I. E. Taylor, E. Noeggerath, W. T. Lusk, and P. F. Mundé, of New York; G. H. Lyman, W. L. Richardson, G. H. Bixby, and J. R. Chadwick, of Boston; W. L. Atlee, W. Goodell, A. H. Smith, and T. M. Drysdale, of Philadelphia; J. Byrne and A. J. C. Skene, of Brooklyn; H. P. C. Wilson and W. T. Howard, of Baltimore; W. H. Byford, of Chicago; J. P. White, of Buffalo; T. Parvin, of Indianapolis; J. D. Trask, of Astoria; E. W. Jenks, of Detroit; H. F. Campbell, of Augusta, Ga.; and G. J. Engelmann, of St. Louis.

Dr. Thomas extended a most cordial welcome to the society, and especially expressed the pleasure which he felt in offering the hospitalities of the New York members to Dr. Robert Barnes, of London, who had come to this country to be present at the meeting of the society. The following gentlemen were invited to take part in the proceedings: Drs. Trenholme of Montreal, Hodder of Toronto, Tagliafero of Georgia, Roseburgh of Hamilton, Canada, Reamy of Cincinnati, Fox of Madison, Wis., Sassdorf of Georgia, Shepard of Grand Rapids, Eveleth of Maine, Seely of Chicago, Hodgen of St. Louis, Eve of Georgia, Bates and Russell of Massachusetts, Ward of Alabama, Brown of Baltimore, and Gænstein of Texas.

Dr. Emmett then read a paper on Incision of the Cervix Uteri. A careful analysis was given of three hundred and forty cases of the various forms of flexion which occur in the cervix uteri. Of these, fifty-three per cent. were of the cervix and forty-seven per cent. of the body. Dr. Emmett considered that a flexion of the cervix was proof that impregnation had not taken place. In cases of anteflexion of the cervix pain at the beginning of the menstrual flow is the rule, and this pain rarely lasts after the flow is fairly established. Where there is anteflexion of the body there is rarely any pain at the beginning of the catamenial period. The author advised against any incision unless the flexion was in the cervix and below the vaginal portion. Two out of three women with flexion of the cervix have become pregnant after the operation.

In the discussion which followed the reading of the paper, Dr. Peaslee agreed entirely with the writer, as did also Dr. White. Dr. Barnes said that he had never seen a case of stenosis of the internal os in which he could not pass, with care, a uterine sound.

Before adjourning for the noon recess, Drs. Jenks, Johnson, and Skene were appointed a committee to nominate officers, and Drs. Lyman, Noeggerath, and Engelmann on the auditing committee.

By invitation the society lunched at the house of Dr. Peaslee.

At three o'clock Dr. Skene read a paper on Cicatrices of the Cervix Uteri. The discussion which followed was participated in by Drs. Trenholme and Emmett.

Dr. Jenks then read a paper on Viburnum Prunifolium, with special reference to its uses in the treatment of the diseases of women. The writer dwelt on its great value in the treatment of the various forms of dysmenorrhœa, especially in that known as spasmodic. The dose he used was from half a drachm to a drachm of the fluid extract, given every two or three hours during the

menstrual period. Drs. Bates, White, Eve, Byford, Mundé, and Engelmann took part in the discussion which followed.

The secretary then read a paper contributed by Dr. H. R. Storer on the Uterine Ebb and Flow as a Factor in Uterine Disease. The object of the paper was to show the necessity of selecting the post-catamenial period as the time for performing uterine operations. Drs. Campbell, Trenholme, and Engelmann briefly discussed the paper, after which Dr. Parvin read the account of a curious case of abnormal menstruation.

In the evening Dr. Fordyce Barker gave a dinner party, and subsequently a reception to the Fellows of the society, at his house, to which also a large number of the New York medical profession were invited.

At ten o'clock on Thursday morning the president, Dr. Barker, delivered the annual address. After referring briefly to the origin of the society and to the discretion and energy of its projectors, he gave a brief sketch of the advancement made recently in this branch of medicine, and showed how large the field still was for future work. Dr. Robert Barnes then read a most admirable paper on the various physiological and pathological changes which may occur during the pregnant state. A special vote of thanks to Dr. Barnes was passed, and the paper was briefly discussed by Drs. Peaslee, Lusk, Richardson, and Noeggerath.

Dr. Byford then read a paper on the Spontaneous and Artificial Disintegration of Fibrous Tumors of the Uterus. Several cases were given by Dr. Byford in which the administration of ergot, for a longer or shorter time, had been followed by the gradual disintegration and expulsion of large uterine tumors. Owing to the late hour the discussion of the paper was postponed until Friday morning.

The Fellows of the society lunched by invitation at the house of Dr. Thomas.

The first paper of the afternoon was read by Dr. Thomas, who gave an account of a case of abdominal pregnancy treated by abdominal section. In the discussion which followed, Dr. Barnes did not agree with the reader that it was necessarily better to leave an opening in the abdominal wound for the subsequent escape, if need be, of the placenta, as he thought that by allowing the wound to close there was less liability to decomposition. He did not believe that it was possible to tell whether the fluid drawn from an abdominal tumor was ovarian from the mere presence of the so-called ovarian corpuscle. To this Dr. Drysdale took exception, and stated that he believed there was a corpuscle which was pathognomic of ovarian fluid. The paper was still further discussed by Drs. Engelmann, Chadwick, and Byford.

A paper on Pneumatic Self-Replacement in Dislocation of the Gravid and Non-Gravid Uterus was read by Dr. Campbell, and discussed by Drs. Emmett, Smith, Chadwick, Peaslee, and Wilson.

On Friday morning the business meeting was held at nine o'clock. The records of the inaugural meeting, and the reports of the treasurer and of the auditing committee were read. Votes of thanks were passed to the New York Academy of Medicine for the use of the hall, and to the New York Fellows of the society for their kind and hospitable reception of the society. The time

for holding the next meeting was fixed for the last week in May, and Boston was selected as the place of meeting. The present list of officers was unanimously reëlected.

The following honorary members were elected: Dr. Barnes and Mr. Wells of London, Drs. McClintock of Dublin, Keith of Edinburgh, Simon of Heidelberg, Schroeder of Berlin, Koeberle of France, Eve of Augusta, Ga., and Wright of Cincinnati.

At the public meeting which followed, the discussion of Dr. Byford's paper was taken up and participated in by Drs. Atlee, Goodell, Drysdale, and Emmett.

The next paper, by Dr. Noeggerath, was upon Latent Gonorrhœa, especially with Regard to its Influence on the Fertility of Women. The paper was merely a still further promulgation of the views set forth in 1872 by the writer, who asserts the existence in women of a subacute form of gonorrhœa which is almost incurable, and which is the cause of a large proportion of the cases of sterility which a doctor is called upon to treat. A man has gonorrhœa and is supposed to be cured of it, but according to Dr. Noeggerath he still carries about with him the traces of the poison, which communicates to the female this so-called latent gonorrhœa. The views of the reader were adversely criticised by Trenholme, Engelmann, and Chadwick.

The secretary read a paper contributed by Dr. Alfred Wiltshire, of England, on Death from Urinæmia in certain Cases of Malignant Disease of the Uterus. A discussion by Drs. Parvin, Campbell, Skene, and Barker followed.

Dr. Engelmann then read an account of two cases of Menstrual Hystero-Neurosis of the Stomach.

An adjournment to lunch at the house of Dr. Emmett followed, and the afternoon session was opened by the report of a case of Extirpation of a Bipartite Uterus and both Ovaries for the Cure of Epilepsy, by Dr. Peaslee, who showed the specimen alluded to. A discussion followed, in which Drs. Trenholme, Thomas, Noeggerath, Emmett, and Atlee took part.

The last paper which was read was by Dr. Goodell on The Genital Lesions of Childbirth. The writer favored the immediate closure of all perineal rents. Drs. Emmett, Campbell, Wilson, Skene, Jenks, Howard, Roseburgh, and Atlee discussed the subject, most of them sustaining the views expressed in the paper. Drs. Jenks and Barker, however, believed that immediate closure was of little use in cases where the perinæum had been previously subjected to long-continued pressure. Dr. Howard did not believe that in cases of delay at the perinæum there was direct pressure on that part itself, but that the head really pressed on the inferior pelvic strait.

A letter was read from Dr. Sims, regretting his unavoidable absence, and a vote of sympathy was passed by the society for Drs. Buckingham and Battey, both of whom were prevented by sickness from being present. The hour having arrived for a final adjournment, the few papers yet remaining on the programme were read by title, as follows: Battey's Operation for Extirpation of the Ovaries, by Dr. R. Battey; Hydrate of Chloral in Obstetric Practice, by Dr. W. L. Richardson; A Case of Labor complicated with Four large Uterine Fibroids and Placenta Prævia, by Dr. J. R. Chadwick; Cases of Cystic

Tumors of the Pelvis, by Dr. G. H. Bixby; Masturbation in Women, with a Report of Seventeen Cases treated with Bromide of Potassium, by Dr. J. R. Chadwick; What is the History of Calculi formed in the Bladder after Operations for Vesico-Vaginal Fistulæ? by Dr. H. F. Campbell; A Case of the Passage of Fœtal Bones from the Bladder, by Dr. James P. White; and papers sent by Dr. J. Matthews Duncan, of Edinburgh, and Mr. Lawson Tait, of Birmingham. The papers will all appear in the volume of Transactions which is soon to be published.

The president delivered a short farewell address, and at five o'clock the society adjourned until next May.

The meetings were wonderfully successful, and the papers were all of unusual merit. The discussions were to the point, and full of instructive suggestions. A letter was received from Dr. Dalton, asking for specimens of ovaries and uteri, with a view of pursuing still further his investigations as to the *corpora lutea* of pregnancy and menstruation.

The Fellows of the society were, during the sessions, most hospitably entertained by the New York members. It had been proposed at first to have a dinner at Delmonico's, but on second thought a more social plan was adopted, and private dinners were given by Drs. Barker, Taylor, and Lusk. The Transactions of the society are to be at once published, giving at length the papers and the discussions. Arrangements have also been made by the secretary for publishing in this volume a list of all the obstetric and gynæcological titles annually prepared for the catalogue of the surgeon-general's office at Washington. The first meeting of the society seems to have been a perfect success, and we can but hope that a similar result will attend the next meeting, in Boston.

THE FARMER'S VETERINARY ADVISER.[1]

The name and reputation of Professor Law are sufficient guarantees that he has brought the various subjects upon which he treats in this volume up to the standard which the present day demands. In the preface he says, "This work is especially designed to supply the need of the busy American farmer, who can rarely avail himself of the advice of a scientific veterinarian. The author is deeply sensible of the low estimate placed upon veterinary medicine and surgery in the United States, and of the necessity of educating the public up to a better appreciation of its value. . . . . In the Western Hemisphere, apart from the larger cities, the great pecuniary interest in live stock is largely at the mercy of ignorant pretenders, whose barbarous surgery is only equaled by their reckless and destructive drugging. . . . . To give the stock owner such information as will enable him to dispense with the unprofitable and perilous services of such pretenders, and to apply rational means of cure, when he happens to be beyond the reach of the accomplished veterinarian, is the aim of this book, and this, it is confidently hoped, it will accomplish for all who will intelligently study its pages."

[1] *The Farmer's Veterinary Adviser.* A Guide to the Prevention and Treatment of Disease in Domestic Animals. By James Law, Professor of Veterinary Science in Cornell University, etc. Ithaca: Published by the author. 1876.

It is upon these points more especially that we would offer a few remarks. Professor Law has undertaken that very difficult matter of adapting scientific knowledge to the comprehension of the common, every-day mind. He has undertaken to combine, in what may be termed a "Popular Medical Adviser," scientific and familiar language. And in this he has succeeded; that is, so far as success is ever attained in such an undertaking.

We do not believe, except in the most simple cases, that the principles of medical treatment (it is for the treatment that such a book is most frequently consulted), dependent as they are upon so many concomitant circumstances, can be made intelligible to the busy American farmer. Especially is this the case in a great proportion of the injuries to which his domesticated animals are constantly liable. How, for example, can he treat the various lesions of the foot and leg, with any degree of satisfaction, without some knowledge of the anatomy of the parts? Nay, how can he even read intelligently on these points? It is just as impossible as it would be for the man ignorant of the first principles of astronomy, or of any other science to read and study intelligently the works of the highest authorities on these subjects. There is indeed great need, as Professor Law remarks, that the people of the United States should be educated up to a better appreciation of the value of veterinary medicine and surgery. There is an apathy on this subject in our country that cannot well be explained, especially when we take into consideration the vast pecuniary value at stake. Ignorance, barbarity, and superstition still usurp the place which should be occupied by education and tried skill. Until within a few years, no provision existed among us for instruction in matters pertaining to veterinary science. Now, however, this want has been supplied, and opportunities are offered by Harvard University and by the Amherst Agricultural College in our State, and notably by Cornell University in New York, for the prosecution of these studies, so far as may be necessary to read intelligently upon the various subjects, and to treat in a rational manner the more common diseases to which the farmer's stock is constantly liable. Even this amount of knowledge, however, can be acquired only by diligent study and faithful attendance upon lectures and recitations, the necessary time for which might be very advantageously given by many of our young well-to-do farmers, during our long winter months. Until our young men avail themselves of these opportunities now offered, and until our people generally are awakened to the importance of education in matters of such vast interest, we must wait patiently. It is difficult to understand why some of those who crowd the ranks of the medical profession do not enter upon a field where they are sure not only of abundant emolument, but of every opportunity for the acquirement of fame and for the exercise of professional skill; nor need they be ashamed of an art that numbers among its ranks men who have contributed very largely to the advancement of physiological science during the last few years, besides being eminent in other branches. They have rather to bear in mind that, to adorn this art, they must bring to their aid the advantages which can be obtained only by thorough education and indomitable perseverance.

The general appearance of the volume is excellent, and we like its arrangement. The chapters on contagious and epizoötic diseases, and on parasites

are concise, and may be sufficiently well understood by an intelligent reader, offering him a large amount of information on very important subjects. The remaining chapters, which are well classified for reference, may be advantageously consulted by the veterinary student and practitioner, as well as by others who may be sure of their diagnosis.

With regard to the preparation of the foot of the horse in shoeing, we support the opinion of Professor Law in every particular; and there can be no subject of greater interest to the farmer or to the medical man, dependent as they both are upon the services of this animal. The great points to be kept in view are the non-mutilation of the foot, by which we mean the simple cutting away of the outer wall or hoof to a proper level, the perfect preservation of the sole and frog in all their integrity, and the avoidance of all rasping of the outer crust. D. D. S.

HUTCHINSON'S ILLUSTRATIONS.[1]

THE third fasciculus of this series shows that the first issues were not intended for display, but are a fair type of what is to be expected in the future. The first illustration is the portrait of a child with extensive osseous nodes, the result of inherited syphilis. The history of this case shows the great advantages possessed by the author for illustrating a certain point, the patient in question having been kept under observation for a long series of years after the drawing was made, until his death, an account of the autopsy being given. The history of the family of which this individual was a member is strikingly characteristic of the disease in question, and is instructive reading. Next follow a picture and an account of cheiro-pompholyx, a disease hardly in place in a work of this kind. The next illustration is entitled Mercurial Teeth, which are to be distinguished from the "characteristic notch in the upper central incisors, which constitutes the test as to inherited syphilis." The author says, "The defects produced by mercury concern chiefly the enamel, although they may, when severe, affect the dentine also. The enamel is usually deficient and the surface of the tooth is in varying degrees rugged, pitted, and dirty. The incisors and canines are usually affected, and not unfrequently we see the enamel deficient on them all below a line which crosses them at the same level. The appearance produced is much as if a line had been stretched horizontally across these teeth at about their middle." We think practitioners will recognize here appearances which are by no means uncommon, and which might with as good reason be ascribed to pie and beans as to mercury, at least in New England, where we doubt not that bad food has committed far greater ravages upon the teeth than drugs are capable of. The fasciculus closes with a description of the ulcerative form of rheumatic arthritis. This is found in the smallest joints, is not attended with the deformity characteristic of the more common variety, and appears at all ages. The disease is called crippling rheumatism, as the use of the joints is greatly

[1] *Illustrations of Clinical Surgery, consisting of Plates, Wood-Cuts, Diagrams, etc., with Descriptive Letterpress.* By JONATHAN HUTCHINSON, F. R. C. S. Philadelphia: Lindsay and Blakiston. 1876.

impaired. An examination of such a joint shows extensive ulceration of the cartilage. This variety, according to the author, has not been hitherto recognized.

If the author will adhere, as we fear he may be tempted not to, to purely clinical surgery in these illustrations, we feel sure that all surgeons will derive pleasure and profit from a perusal of them.

THE CONGRESS AND THE AMERICAN MEDICAL ASSOCIATION.

We have taken great interest in the meeting of the International Medical Congress and rejoice at its success, and now we would consider the causes of it. Comparisons between the congress and the American Medical Association have been numerous, and all to the disadvantage of the latter. Though this judgment is just, inasmuch as the meeting was far superior to any that the association has held for years, or indeed at all, yet we must remember that the two cannot be fairly compared. The association has ethical and disciplinary questions to deal with as well as medical ones. Much is gained by keeping the former as far as possible from the general meetings, but they cannot be altogether excluded, nor is it right that they should be, though they introduce a disagreeable element and endanger the harmony of the meetings. The congress was able to devote itself strictly to medical matters. The impertinent attempt of the temperance people to introduce their hobby met with slight success. Unanimity was the rule. The congress had the great advantage of having a short and definite existence. It was born and died in the same week, and will not rise again, though it will, we hope, be followed by others of its kind. It was consequently free from the many disturbing influences that surround the association. As a matter of detail we must mention with praise the admirable plan of having printed announcements of the discussions. The association can certainly profit by the example of the congress, but, as we hope that better days are in store for it, we would not have it suffer by comparing it with a very dissimilar body. We reserve for another occasion the question of the proposed union of the American and Canadian medical associations.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.

This young and vigorous society will meet in Boston in the first week of October. The great hall of the Institute of Technology, which has generously been placed at the disposal of the association, is admirably adapted for its deliberations. We have received a circular stating the order of business, which promises valuable results. The plan appears to be very systematically arranged. Not only are the titles of the papers announced, but also the names of the gentlemen who are to take part in the discussions, with, in many cases, an abstract of their remarks. We highly approve of the rule limiting papers and reports to thirty minutes, and each speaker in the discussions to ten, or,

at the president's discretion, to twenty minutes. There will be addresses in the evening by distinguished gentlemen, which will be of general interest. Among the subjects for discussion at the regular meetings we notice the question of expert testimony, which we understand is to be thoroughly treated. We hope the influence of the association will be sufficient to start a reform which we have long but ineffectually advocated. By this implied doubt we touch a weak point, perhaps the only weak point, of the association. The names of its leaders make us certain that it will do good work, but unfortunately it possesses no direct power to do away with abuses or to introduce reforms. This, of course, is no reflection on the association, but is simply a public misfortune. Agitation, however, is the first step towards improvement, and this, we are sure, will be persistently but temperately kept up till it brings its fruits. Indeed, we of Massachusetts have less cause of complaint than many of our countrymen, for in our pride in our board of health we almost forget the nausea caused by the thought of our system of coroners.

MEDICAL NOTES.

— We regret to learn that Dr. C. E. Woodbury, assistant physician at the McLean Asylum for the Insane at Somerville, while in the discharge of his duties at the hospital on the 25th inst., was assaulted by an insane patient with a croquet mallet, receiving injuries of the head which, it is feared, will prove fatal. We understand that Dr. Woodbury was first knocked down, and then, when on the ground, violently beaten on the head, and his skull was fractured. This is another sad instance of the dangers to which physicians who devote themselves to the care of the insane are constantly exposed, and we hope that the fatal result may in this case be averted, though from the nature of the injuries this seems hardly possible.

— The *Medical Examiner* announces that Hofrath Gustav Simon, the well-known surgeon and professor of surgery at Heidelberg, died suddenly on the 28th of last month.

— The *Vienna Medical Press* of August 27th records the death of Max Josef von Chelius, whose standard work on surgery was translated into English by the late Mr. South, and into French by Dupuytren's nephew. Born in 1794, Chelius became a supplementary professor of surgery at the Heidelberg University in 1817, and two years afterwards was raised to the surgical chair. The first number of his popular work was published in 1822, but the work was not completed until 1838. It was justly held in high estimation, and, if princely decorations be any proof of merit, the text-book of Chelius was duly estimated, for its author received a bit of ribbon from almost every potentate in Europe.

— In an article on eu-catharsia published in the *Philadelphia Medical Times* of August 19, 1876, Benjamin Lee, M. D., discusses at some length the mechanics of defæcation. The essentials for eu-catharsia he states are: first, objectively, a support of the proper height, with an aperture of the proper shape and dimensions. Second, subjectively: (1) a healthy, vigorous tone of all the

muscles of the trunk, but especially of the abdominal muscles; (2) activity in the peristaltic action of the colon, and a normal condition of its secretions; (3) a sensitive condition of the mucous membrane of the rectum just within the sphincter; (4) a rectal cavity of normal size; and (5) a stout *levator ani*. The shape of the aperture in the seat of the stool or closet should be such as to give complete and easy support to the body without offering an obstacle to the passage of the fæces. Its sides should be parallel, its edges smoothly rounded. For an adult it should have a longitudinal diameter of from twelve to fourteen inches, and a transverse diameter of from five to seven. The subjective conditions may be promoted by such exercises as will tend to develop the abdominal and expiratory muscles without making a drain upon the nervous forces, by manipulations with a view to directly assisting the peristaltic labors of the colon, by pressure and percussion directed to arousing the sacral plexus to activity, and by direct support to the distended rectum and the paralyzed *levator ani*. The judicious and persistent use of these means, combined with hygienic measures directed to the improvement of the general tone of the system, would go far towards breaking up the pernicious use of medicinal cathartics.

BOSTON CITY HOSPITAL.

SURGICAL CASES OF DRS. CHEEVER AND GAY.

REPORTED BY GEORGE W. GAY, M. D.

A Match in the Air-Passages; Tracheotomy; Death. — A boy, one year and a half old, got a common friction match into his fauces at about one o'clock in the afternoon of February 18, 1876. While efforts were being made to seize the match it became dislodged and was drawn into the trachea. The child was suffering from whooping-cough at the time, and the paroxysms were greatly aggravated by the presence of the foreign body. He soon became much exhausted, although the respiration was moderately easy between the attacks of coughing. The patient was brought to the hospital late in the afternoon, and tracheotomy was performed by Dr. Cheever at seven P. M. The trachea was opened and searched with forceps, and the larynx was explored by one finger passed in through the mouth meeting another through the wound. No foreign body was found there, but it finally came up into sight from below, during a violent fit of coughing, was seized and removed. It proved to be a match with the brimstone burned off. The dyspnœa and other symptoms of irritation of the air-passages ceased immediately. A tracheal tube was introduced, and the child placed in a room filled with steam.

As is usual after this operation, even in fatal cases, the child remained very comfortable for several hours, when the moist râles, which were present in a moderate degree previous to the operation, began to increase; the respiration became labored, and the child died from exhaustion twenty-one hours after the tracheotomy. There was no autopsy.

As children have carried foreign substances in the trachea much longer than this little patient did, and then have made a good recovery after the removal,

it is fair to suppose that the bronchitis attendant upon the whooping-cough turned the scale against a child of so tender an age.

A shawl-pin, known to have been in the air-passages for six weeks, was removed from the trachea of a child three years old, by Dr. Cheever, in 1870. This child had pneumonia and bronchitis while the foreign body was in, but recovered perfectly after its removal.

Contusions of the Abdomen; Chronic Peritonitis; Death; Autopsy. — Mrs. M., fifty years of age, was admitted to the hospital, under our care, September 16, 1875. She was reported to have been kicked in the abdomen by her husband, about forty hours before her admission.

She was drowsy, but had her senses sufficiently to answer all questions rationally. She had no pain, except when firm abdominal pressure was made, and then complained of only moderate tenderness. There was no tympanites, but, on the contrary, the abdomen was soft and natural to the touch. A few spots of ecchymosis were found on the abdominal parietes, but nothing to indicate any severe injury. Her pulse was 80, and weak. She said she had passed no water for twenty-four hours. Her bladder was empty at the first examination, but a quart of clear urine was drawn eight hours afterward.

A compress and bandage, with some cooling lotion, were applied to the abdomen. She was put upon a liquid diet, and ordered opium *pro re natâ*.

She slept little during the night, and the next day her pulse was 128. She had no pain, delirium, nor vomiting. The urine was scanty. Her bowels moved freely after taking a laxative. She took nourishment fairly.

September 18th (third day). Patient slept pretty well during the night. Bowels acted naturally and without pain this morning. Has had no retention to-day. She seemed to be doing well, and felt so smart that she got out of bed for a few minutes, contrary to orders. Soon after getting into bed again, while sitting upright, talking to her daughter, she vomited a very offensive liquid, and fell back on her pillow, dead. Her face was livid and cold.

At the autopsy, made by Dr. Bolles forty hours after death, the peritoneal cavity contained two and a half pints of bloody fluid, by measurement. There were only slight traces of recent lymph, but abundant adhesions of considerable duration were found among the intestines. The blood in the heart and large vessels was very black and fluid. There were old adhesions of the left lung. There was no rupture of any of the viscera. The stomach was full of matter like that vomited at death. The brain and other organs were found to be healthy.

This case is of interest, not only on account of the sudden death, but also on account of the absence of pain and acute tenderness, and the apparently favorable progress of the patient up to the time of her death. There was no history of any previous abdominal or peritoneal trouble. Her injuries did not seem sufficient to give rise to dangerous inflammation, and they very likely would not have done so had the patient not been suffering from the results of a previous peritonitis.

Was her sudden death due to a heart-clot? No such clot was found after death. Was it due to a fatal syncope? Persons dying in that way are usually very pale. Was it due to a thrombus or embolus? The autopsy revealed nothing of the kind. Was is it not more probably due to a collapse of the vital powers? We know not to what else to ascribe it.

Hydrocele of the Neck; Removal; an Obstinate Sinus; Recovery. — Miss C., school-girl, aged fifteen years, was operated on by Dr. Ingalls, June 18, 1875, for a cystic tumor of the neck of several years' duration. The growth was about three inches in diameter, and the cyst wall was attached to the sheath of the carotid. The tumor was wholly removed after a careful dissection. The wound was treated by simple dressings, and the patient was discharged in ten days, nearly well.

She was readmitted in about three months, under Dr. Gay's care. She then had a sinus two inches deep, which extended to the floor of the mouth and was lined with a thick, pyogenic membrane. She was etherized, and the sinus was thoroughly cauterized throughout its whole extent with the acid nitrate of mercury.

The wound was afterward treated for two months and a half with applications and dressings of sulphate of zinc, tincture of iodine, nitric and carbolic acids, nitrate of silver, etc., with the effect of reducing the sinus so that it would not admit an ordinary probe. A small granulating spot, of the size of a pea, was all that remained, and the patient was again discharged.

Two months afterwards (February 10, 1876) she entered the hospital for the third time, and was under our care. The sinus was an inch deep. The patient was, and always had been, in a fair state of health.

The sinus was thoroughly cauterized with nitrate of silver, crystallized upon a silver probe. A thick pad of spongio-piline was firmly bound upon the sinus, leaving its orifice free. The patient was put upon a liquid diet, and ordered to talk and open the jaws as little as possible. She was well in three weeks, and remained so at the end of four months, when last heard from.

This mode of treatment is the one so highly recommended by Hilton in his book on Rest, and is a very valuable one. It is available for sinuses in various parts of the body, where the opposing walls of a sinus or wound are continually rubbing against each other, as in the above case. If some such method could be used in the treatment of fistula in ano our efforts in treating that affection without an "operation" might be more successful than they are at present.

LETTER FROM DR. HOLMES.

Messrs. Editors, — I fear that some of your readers may wrong themselves over the expressions attributed to Professor Austin Flint, in your number of September 14th, relating to Dr. J. B. S. Jackson.

He is reported as saying: "J. B. S. Jackson unfortunately, if not blamably, became satisfied with his position as professor in a leading school and curator of a museum rich in specimens. He might have been more prominently identified with pathology in this and in every other country."

The word "unfortunately" has, we think, one syllable too many. The word "blamably" sounds strangely to us among whom he has lived so long in connection with a name which we have learned to associate with the most conscientious and exact discharge of duty.

In one sense it is true that he has been "satisfied with his position." He has delighted in its duties and given his whole soul to them, and labored as no one would labor except for love of his work. The place has certainly suited him, and he has suited it with such rare adaptation that it may be doubted if the coming century will find as perfect a fit among his successors. Men like Dr. J. B. S. Jackson and Dr. Jeffries Wyman are not made in batches and replaced as easily as an empty post-hole is filled with a new stick of wood. These two men have lived in their work as very few Americans do, except in the more lucrative callings, content with labor as their only recreation, and the attainment of truth as their only reward. Dr. Jackson may have been satisfied with his position, but he was never satiated with working to bring order out of confusion, intelligible presentation out of puzzling obscurity; to preserve carefully all that the past had treasured, and to add by untiring industry to the resources of the collections of which he had charge. Remembering, too, that he was always imparting instruction in the midst of his other labors, teaching teachers as well as pupils, — for there was no visitor, native or foreign, who knew too much to profit by his lessons, drawn directly from his own observations, and illustrated by specimens of his own preparation, — I think we may say that others as well as he himself had a right to be satisfied with his position.

It may be true that "he might have been more prominently[1] identified with pathology in this and in every other country." The chorus of saints and archangels might have reached a higher note than they ever attained in the *trisagion*, for aught that we know. "Might have been" is a tub with no bottom to it. But our friend Dr. Flint may have forgotten for the moment what *has* been in this case. A professor in the University of Pennsylvania, hardly less distinguished than the eminent critic himself, characterized Dr. Jackson's first descriptive catalogue as the most important contribution which had ever been made in this country to the branch to which it relates, namely, pathology. Since the date when that work was published, and during the period in which Dr. Jackson has been satisfied with his position, he has published a much more extended catalogue, that of the Warren Anatomical Museum, which he so largely helped to make what it now is. The name "catalogue" must not lead to the undervaluing of these two admirable works. They are quarries of knowledge, say rather ready-hewn foundation-stones, which may be built on a century hence, when most of the vestiges of contemporary American medical literature will have been long effaced, and the titles of its books and the names of their authors will be known only among the dry leaves of dreary retrospects. I may, it is true, have overlooked the monumental achievements of later years, but excepting of course the magnificent volumes which our army surgeons and physicians have sent us from Washington, I think it may be still said we have had nothing so important in pathological science from any American author as Dr. Jackson's two printed volumes.

The whole country knows, or ought to know, these most valuable catalogues. But only the medical community in which Dr. Jackson has lived can be aware of all that he has done for pathological knowledge. He may be said to have

[1] Journal, September 14, 1876, p. 319, for "permanently" read "prominently."

created one museum, that of the Society for Medical Improvement. He has reorganized and almost in fact re-created a second, the Warren Anatomical Museum. Look at the records of the society just referred to, and it will be seen that he has been the life of it for the greater part of half a century. If he has never made as many thousand autopsies as Rokitansky, it is only because Boston could not furnish as many as Vienna, — for there was a period of many years during which no good Bostonian could rest quite in peace at Mount Auburn, unless his internal arrangements had passed under the Rhadamanthine inspection of our great pathologist. If he had published his carefully recorded cases, he would have been as voluminous an author, to say the least, as Morgagni. But his fullest record, like that of John Hunter, like that of Jeffries Wyman, stands on the shelves where the labor of a life-time is legible. Add to these memorials the grateful recollection of the thousands whom he has taught to value sincere investigation and simple statement, by his constant example as well as his precepts, and the feelings universally entertained towards him in our medical community may be understood, without reference to the personal qualities which commend him to regard and respect. When his medical brethren begged him a few years since to sit for his portrait, to be placed in one of the museums amidst the works of his untiring hands, they felt that this unusual compliment was paid to one whom all, old and young, delighted to honor as the first American pathologist of his generation, at once enthusiastic, sagacious, accurate, indefatigable, and absolutely to be depended upon for modest truthfulness in his record of what he observed. The accomplished histologist of a new epoch may supplement Dr. Jackson's observations with a novel order of facts, but nothing can supersede the value of his exact transcripts of nature as they stand on his printed pages for those who come after him.

I feel sure that the distinguished brother professor, whose words may have been misrepresented, and are liable to be misconstrued, is as ready as any of us to do justice to all true excellence and meritorious achievement, and that he will understand my motives in taking the words ascribed to him in your number of September 14th as a fitting hint to speak of all that our profession owes to Dr. J. B. S. Jackson.

O. W. H.

LETTER FROM LONDON.

Messrs. Editors, — Mindful of the influx of London medical practitioners which the Centennial celebration and the International Medical Congress at Philadelphia are likely to draw thither, I believe your readers will be glad to find in this letter a sketch of the system of medical education, examination, and licensing now in operation in London.

I hope to make the matter so clear that when my countrymen visit your great continent this autumn they may not have to explain to very many of their transatlantic brethren how it is that, in England, only a portion of the medical practitioners are styled doctor.

The lad of seventeen and upwards who, having received a good general education, desires to commence to study especially for the medical profession is

required to pass a preliminary examination (approved by the Medical Council of Great Britain) in the ordinary subjects of general education, namely, English language, composition, dictation and grammar, arithmetic, algebra, Euclid, Latin prose, history, and geography.

There are many of these preliminary examinations, most of the various licensing bodies furnishing one or two in the year, with the necessary consequence that the standard varies very considerably, in numerous instances far exceeding the minimum insisted upon by the Medical Council. Moreover, it is only such candidates as have passed a superior preliminary examination, including two of the following subjects, natural philosophy, French, German, Greek, and higher mathematics, besides either chemistry, botany, or zoölogy, that are admissible to the higher diplomas of the chief licensing bodies.

When a candidate has given the necessary proof of the sufficiency of his general education, he is permitted to place his name on the register of medical students kept by the British Medical Council.

No technical education received prior to such registration is allowed to count as part of the curriculum required, by the various licensing bodies, of candidates for their diplomas. The duly-registered student of medicine may enter at one of the recognized medical schools; of these there are ten in this metropolis, attached to hospitals containing not fewer than one hundred beds. The medical schools afford a course of education which accords with the requirements of the licensing bodies, and it remains for the candidate, in preparing for the diploma of one or more of these corporations, to conform to the curriculum laid down by them. The licensing bodies in London are the Royal College of Surgeons of England (R. C. S. Eng.), the Royal College of Physicians of London (R. C. P. Lond.), and the Society of Apothecaries (S. A.). The order of the above accords with the frequency with which their respective diplomas are sought by London medical students. It should be added that a London student may, by adhering to the necessary curriculum, and by passing the requisite examinations, enter the medical profession by securing the diploma of any of the Scotch or Irish licensing bodies. But for the present we will confine our attention to the two corporations just mentioned, namely, the Royal College of Surgeons of England and the Royal College of Physicians of London.

Each of these colleges defines the certificates of attendance upon lectures and of practical instruction which it will require of the candidate before he is admitted to the examination for their respective diplomas of member and licentiate. In both instances the examination for the diploma, or license to practice, is divided into two parts, the primary and final. The primary examination, which tests the candidate's knowledge of anatomy and physiology, may be passed by him at any age, and at any time after the completion of his second winter's study at a recognized medical school.

Candidates must be twenty-one years of age before they are admissible to the final examination of any licensing body, and they must have been engaged during not less than four years, subsequent to their registration as students of medicine, in the acquirement of professional knowledge, according to the curriculum of the corporation whose diploma they seek, and they must have

served during nine months, as clinical clerks and dressers, in the medical and surgical wards of a recognized hospital.

At the Royal College of Surgeons of England, in the final examination for membership, candidates are examined in surgery, surgical anatomy, pathology, diagnosis, and minor surgery; the examination, which is partly written and partly oral, is rendered as efficient a practical test as possible by the introduction of patients.

The diploma of Member of the Royal College of Surgeons of England is not granted to the candidate who has passed the final examination for it until he either holds a diploma in medicine (granted by another corporation), or has passed an examination in medicine, medical pathology, materia medica, and prescribing, provided by the Royal College of Surgeons of England. The diploma of Member of the Royal College of Surgeons of England entitles the holder to be placed on the register of medical practitioners of Great Britain as a surgeon, and to practice surgery, but confers no distinctive title. The subjects for the final examination for the license of the Royal College of Physicians of London include medicine, pathology, midwifery, chemistry, materia medica, and surgery, but this last is omitted in the case of candidates who already hold a diploma entitling them to be registered as surgeons.

The license of the Royal College of Physicians of London renders the holder a physician, entitles him to be registered as such, and to practice medicine, surgery, and midwifery, but confers no title upon him, though by courtesy licentiates of the Royal College of Physicians of London are commonly styled doctor. Whilst the holder of either of the above-named diplomas is admissible on the register of British medical practitioners, and therefore entitled to practice the medical profession generally, yet the member of the Royal College of Surgeons of England can sue in a court of justice for fees in surgical cases only, whereas the licentiate of the Royal College of Physicians of London can recover fees for medical, surgical, or obstetric practice.

A few words will suffice respecting the diploma of licentiate of the Society of Apothecaries (L. S. A.), which is conferred, after examination, upon candidates who either possess a recognized medical diploma, or who have, in addition to their hospital medical school training, been apprenticed to a licentiate or member of the society. The diploma of Licentiate of the Society of Apothecaries entitles the holder to medical registration, and enables him to recover by law fees due to him as an apothecary. It is a diploma much out of fashion in the present day, when it is seldom sought save by registered practitioners, who, having but one diploma, require a second to render them eligible candidates for some public appointment.

Both the Royal College of Physicians of London and the Royal College of Surgeons of England confer titles superior to those described above, the former granting its diploma of membership or fellowship, and the latter its fellowship.

Additional power in the government of the corporation, and the distinction attaching thereto, are the only privileges which are enjoyed by the members and fellows of the Royal College of Physicians of London as distinguished from licentiates. The same is true in the case of fellows as distinguished

from members of the Royal College of Surgeons of England. Licentiates of the Royal College of Physicians of London, not less than twenty-five years of age, may obtain the membership by election and examination; but the rules of the Royal College of Physicians of London forbid its members to practice surgery; hence the membership of the Royal College of Physicians of London is sought only by those who intend to devote themselves to purely medical practice.

The fellowship of the Royal College of Surgeons of England is awarded, after a most stringent examination, to candidates, not less than twenty-five years of age, who have fulfilled a special curriculum; no higher extra-university distinction than this exists among London surgeons.

The fellowship of the Royal College of Physicians of London, which is conferred by election, is the highest extra-university distinction which a London physician can receive from his brethren. It should be added that the superior grades just mentioned are practically seldom attained save by those practitioners who aim at following a consultation or pure practice in medicine or surgery, it being very usual in the large British towns for the leading practitioners to confine their attention to but one class of practice.

In considering the above it should be borne in mind that there are many other portals to the medical profession besides those named; however, as there is considerable prospect of all of these being united into a "one portal system," little need be said of them.

The different licensing bodies grant, after examinations of various degrees of stringency, to candidates educated in accordance with the specified curriculum, diplomas which the Medical Council of Great Britain recognize for registration. In Great Britain no man can be a legal practitioner of medicine unless he is entitled to be placed on the medical register.

From the above it will be observed that, courtesy excepted, none of the diplomas yet mentioned entitle the holder to be dubbed doctor. In England the title of doctor can be obtained only from a university, after a university education, and is, correctly speaking, a degree, as distinguished from the diplomas, licenses, or qualifications such as we have been considering. Except in the case of the London University, degrees in medicine are conferred only after the candidate for them has been in residence at a university.

The degree of M. D. is usually attained subsequently to a minor degree, such as M. B. (Bachelor of Medicine) or M. A. (Master of Arts). The universities confer similar degrees in surgery, but these are rarely sought. The licensing bodies and medical schools encourage the acquirement of university degrees by enforcing only a modified curriculum of study upon their holders, a course of action which promises to bring a large proportion of university men into the medical profession.

Up to the present date it is unusual for the purely surgical practitioner to possess any university degree, whereas the purely medical practitioner is seldom without the degree of bachelor or doctor of medicine. This accounts for the distinction in the popular title of surgeons and physicians, who are here styled respectively Mr. and Dr., much to the astonishment of their American friends.

COMPARATIVE MORTALITY-RATES FOR THE WEEK ENDING SEPTEMBER 16, 1876.

	Estimated Population, July 1, 1876.	Total Mortality for the Week.	Annual Death-Rate per 1000 for the Week.	Death-Rate for the Year 1875.
New York	1,061,244	494	24.21	29.35
Philadelphia	825,594	331	20.85	22.24
Brooklyn .	506,233	200	20.54	24.92
Chicago . .	420,000	170	21.05	19.75
Boston . .	352,758	138	20.34	26 20
Providence	101,500	29	14.85	19.02
Worcester .	51,087	19	19.34	20.91
Lowell . .	51,639	31	31.21	20.55
Cambridge	49,670	13	13.61	23.31
Fall River	50,372	22	22.71	23.99
Lawrence .	36,240	18	25.83	25.96
Lynn . .	33,548	21	32.55	19.23
Springfield	32,000	7	11.37	20.93
Salem . .	26,344	14	27.41	22.92

Normal Death-Rate, 17 per 1000.

NOSOLOGY.

MESSRS. EDITORS, — In a recent number of your JOURNAL I entered a protest against the common practice of rushing to the press with plaudits of new remedies, remedies which have not received sufficient of practical testing to enable one to speak with assurance of their merits.

Permit me on this occasion to enter a more emphatic protest against a still more objectionable practice (also too common), that of attaching new names to such trains of symptoms as may present some features not perfectly comprehended by the writers suggesting such names.

The following report of a case, copied from the *New York Medical Record*, is a marked instance of the kind to which we advert : —

"DYSPEPTIC ASTHMA. — At a late meeting of the Berlin Medical Society, Professor Hennoch detailed the histories of several cases of this affection occurring among children, which had come under his observation. The symptoms were alarming dyspnœa, with pallor of the face and lividity of the lips, coldness of the extremities, small and extremely frequent pulse, superficial and very frequent respiration, and great mental apathy. The affection apparently depended upon disturbance of the digestive functions. There were in all of the cases some tumidity and tenderness in the epigastrium; but in spite of the threatening symptoms, *not the least indication of cardiac or pulmonary disease could be found on repeated and careful examinations.* In one case, that of a child nine months old, in whom there had been constipation and vomiting, great relief was afforded by the application of numerous dry cups to the chest, and *recovery from the attack coincided with the eruption of an incisor tooth.* Professor Hennoch, although skeptical at first, ultimately came to agree with the opinion expressed by Traube, who saw the first case in consultation, namely, that the disturbance in the stomach excited a reflex vaso-motor spasm in the small arteries, whence followed the coldness of the extremities, imperceptible pulse, stasis in the venous system and right heart, cyanosis, accumulation of carbonic acid in the blood, and dyspnœa. He therefore assigns the name *asthma dyspepticum* to the affection. — *Berl. klin. Woch.*, May 1, 1876."

The italics are my own.

Thus we have a case of *simple dentition* expatiated upon learnedly, treated empirically, and named inappropriately. A very tyro in the profession should have observed that the age of the child, the condition of the gums, and the general train of symptoms indicated the source of the disturbance. We are *not* surprised that "the recovery from the attack *coincided with the eruption of an incisor tooth*," but we *are* surprised that the condition of the

stomach was not recognized as being purely sympathetic. From the *fact* that "*not the least indication of cardiac or pulmonary disease could be found on repeated and careful examinations,*" the name selected, *asthma dyspepticum*, becomes doubly inappropriate.

Our nosological table is already too much extended, and the progress of our science necessitates frequent additions; precision of nomenclature should therefore be observed, and designations which tend to obscure or confuse (as in the above instance) should be carefully avoided.

The apology for the character of the above criticism may be found in the feelings naturally engendered by reading the article which is the subject of the criticism.

Yours, H. R. R.

BOOKS AND PAMPHLETS RECEIVED. — Specialists and Specialties in Medicine. An Address. By M. H. Henry, M. D. New York: William Wood & Co.

Report of the Committee on Medical Education made to the Medical Society of the State of California. By James F. Montgomery, M. D., Chairman.

A Contribution to the Study of the Transmission of Syphilis. By R. W. Taylor, M. D. (Reprinted from the Archives of Clinical Surgery, September, 1876.) New York: Routledge & Co. 1876.

Micro-Photographs in Histology, Normal and Pathological. Vol. i., No. 2. By Carl Seiler, M. D., in connection with J. Gibbons Hunt, M. D., and Joseph G. Richardson, M. D. Philadelphia: J. H. Coates & Co.

Upon some Points in the Ætiology of Hereditary Syphilis. By F. R. Sturgis, M. D., Clinical Lecturer on Venereal Diseases in the University of the City of New York. (Reprinted from the June number of the Chicago Medical Journal and Examiner.)

A Contribution to the Treatment of Uterine Versions and Flexions. By Ephraim Cutter, A. M., M. D. Second Edition, entirely re-written. Boston: James Campbell. 1876.

Yellow Fever and Malarial Diseases. By Greensville Dowell, M. D., Professor of Surgery in Texas Medical College, etc. Philadelphia: Medical Publication Office. 1876.

Human Rights as Exemplified in the Natural Laws of Marriage, Legitimacy, and Life in General. By George J. Ziegler, M. D. Philadelphia. 1876.

Reply of Dr. Frothingham to a Member of the Michigan State Society on the Subject of Homœopathy in the University of Michigan. (Reprinted from the September number of the Peninsular Journal of Medicine.)

A Clinical Lecture on the Use of Plastic Dressing in Fractures of the Lower Extremity. By David W. Yandell, M. D. Indianapolis. 1876.

Transactions of the Medical Society of New Jersey. 1876.

Typho-Malarial Fever: Is it a Special Type of Fever? By J. J. Woodward, Assistant Surgeon U. S. A., in charge of the Representation of the Medical Department U. S. A. at the International Exhibition of 1876. Philadelphia.

APPOINTMENTS IN THE MEDICAL STAFF, M. V. M. — The following appointees having successfully passed the Board of Medical Officers authorized by G. O. No. 24, A. G. O., current series, have been commissioned: —

Benjamin H. Hartwell, Assistant Surgeon (rank first lieutenant) Tenth Regiment of Infantry, from September 18, 1876.

William A. Dunn, Assistant Surgeon (rank first lieutenant) Battery A, Light Artillery, from September 21, 1876.

Resigned and discharged: Assistant Surgeon Levi Howard, Co. F Unattached Cavalry.

SUFFOLK DISTRICT MEDICAL SOCIETY. — There will be a regular meeting on Saturday evening, September 30th, at seven and a half o'clock. The following papers and cases will be read: —

Dr. E. H. Bradford: Cancer of Breast; Removal; Antiseptic Treatment.

Dr. C. E. Wing: Vaginal Ovariotomy.

A. L. MASON, *Secretary.*

MEDICAL LIBRARY ASSOCIATION. — The annual meeting will be held at No. 5 Hamilton Place on Tuesday, October 3d, at four o'clock, P. M., Dr. O. W. Holmes, the president of the association, in the chair. The librarian and treasurer will present their reports.